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| APPLICATION NO.                                                                                      | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/605,340                                                                                           | 09/23/2003  | Stefan Preijert      | 0173.038.PCUS01     | 2339             |
| 65858                                                                                                | 7590        | 07/17/2008           | EXAMINER            |                  |
| NOVAK DRUCE AND QUIGG LLP (Volvo)<br>1000 LOUISIANA STREET<br>FIFTY-THIRD FLOOR<br>HOUSTON, TX 77002 |             |                      | COZART, JERMIE E    |                  |
|                                                                                                      |             | ART UNIT             | PAPER NUMBER        |                  |
|                                                                                                      |             | 3726                 |                     |                  |
|                                                                                                      |             | MAIL DATE            |                     | DELIVERY MODE    |
|                                                                                                      |             | 07/17/2008           |                     | PAPER            |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/605,340             | PREIJERT ET AL.     |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Jermie E. Cozart       | 3726                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 08 February 2008 and 08 May 2008.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 18-33 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 18-20 and 23 is/are rejected.

7) Claim(s) 21,22 and 24-33 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 08 February 2008 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 18-20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winkler et al. (3,793,703) in view of Bielefeldt (3,697,725) and Lee et al. (5,934,544).

Regarding claim 18, Winkler discloses a method for producing a vehicle axle (see FIG. 14) by heating the blank (2) to a working temperature (col. 3, lines 47-48) then rolled (col. 3, line 49) thereby forming the first blank (2) into an intermediate product having a predetermined profile along a longitudinal extent thereof; feeding the first blank (2) to a forging press (12; col. 3, lines 52-56) having a number of cooperating die pads (9, 10), and working the first blank (12) to form a substantially finished product (6) having a cross section substantially in the form of a hat profile of predetermined height, width and material thickness along a length thereof; placing in connection with the hat profiled first blank (2), a second blank (2) having essentially the same profile as the hat profile of the first blank (2) in the dividing plane of the cooperating die pads; and joining (col. 4, lines 13-15) the first (2) and the second blank (2) together, at respective edges thereof, and forming a composite vehicle axle (see FIG. 14).

Regarding **claim 19**, Winkler discloses at least the first blank (2) being forged vertically (see FIG. 16) with respect to a principal plane in which the composite vehicle axle is intended to be used.

Regarding **claim 20**, Winkler discloses the forging operation (col. 4, line 21 – col. 5, line 55) comprising a first step in which a pair of first cooperating die pads (9, 10) form the material in the first blank such that the first blank material acquires a predetermined, varying height in a vertical plane along a longitudinal extent thereof and the first blank further acquires a basic principal shape in the principal plane in which the composite vehicle axle is intended to be used.

Regarding **claim 23**, Winkler discloses the second blank (2) being preformed in one of a separate forging operation to have substantially the same profile (see FIG. 14) as the hat profile of the first blank in a dividing plane of the die pads.

Winkler, however, does not disclose directing a first blank through a furnace or directing the first blank between a pair of rollers having profiled surfaces.

Bielefeldt discloses directing a first blank (11) through a furnace (10) for heating work-pieces, in order to raise the work-piece to the desired temperature. *See column 2, lines 14-20, and figure 1 for further clarification.*

Lee discloses directing a first blank (18) between a pair of rollers (102, 104) having profiled surfaces, in order to roll form the blank into vehicular structural member having the desired shape to the blank. *See column 3, line 65 – column 4, line 2, and figure 6A for further clarification.*

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to direct a first blank of Winkler through a furnace and

to direct the first blank of Winkler between a pair of rollers having profiled surfaces, in light of the respective teachings of Bielefeldt and Lee, in order to raise the temperature of the blank and to form the blank into a vehicular structural member having the desired shape.

***Response to Arguments***

3. Applicant's arguments filed 2/8/08 have been fully considered but they are not persuasive.

Applicants argue that it is unclear that the referenced rolling does anything at all like rolling with rollers having profiled surfaces as recited in the claims.

In response, the Examiner maintains that the aforementioned limitation requires "directing the blank between a pair of rollers having profiled surfaces and thereby forming the first blank into an intermediate product having a predetermined profile along a longitudinal extent thereof", Winkler teaches rolling the blank (2) and thereby forming the first blank (2) into an intermediate product (i.e. shape 3 shown in Fig. 2) having a predetermined profile (see Fig. 2) along a longitudinal extent thereof. The Examiner acknowledges that Winkler is silent as to how the blank is rolled, and provided the secondary reference to Lee to show that a blank is directed between a pair of rollers having profiled surfaces to thereby form the blank into an intermediate product having a predetermined profile. In addition, it is clearly apparent that in order for the blank in Fig. 1 of Winkler to reach the dimension and configuration of the intermediate product in Fig. 2, that the rolling had to occur in a direction that lengthens the overall shape of the blank. There is no distinguishing claim language present in the claims which define

over the combination of Winkler and Lee. Therefore, the combined teachings of the references render the claimed invention obvious.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicants also argues that the Examiner fails, however, to establish why one having ordinary skill in the art would have been motivated to do X and Y to the Winkler work-piece, particularly in view of the ambiguity of Winkler pointed out above.

In response, the Examiner maintains the Winkler reference is not ambiguous with respect to the manner in which the blank is rolled, since the Examiner has offered a detailed explanation of the teachings and his rationale for combining Winkler with Lee to arrive at the claimed invention. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Winkler discloses all of the claimed subject matter except for directing a first blank

through a furnace or directing the first blank between a pair of rollers having profiled surfaces.

Bielefeldt discloses directing a first blank (11) through a furnace (10) for heating work-pieces, in order to raise the work-piece to the desired temperature. *See column 2, lines 14-20, and figure 1 for further clarification.*

Lee discloses directing a first blank (18) between a pair of rollers (102, 104) having profiled surfaces, in order to form the blank into vehicular structural member having the desired shape to the blank. *See column 3, line 65 – column 4, line 2, and figure 6A for further clarification.*

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to direct a first blank of Winkler through a furnace and to direct the first blank of Winkler between a pair of rollers having profiled surfaces, in light of the respective teachings of Bielefeldt and Lee, in order to raise the temperature of the blank and to roll form the blank into a vehicular structural member having the desired shape.

#### ***Allowable Subject Matter***

4. Claims 21, 22, and 24-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermie E. Cozart whose telephone number is 571-272-4528. The examiner can normally be reached on Monday-Thursday, 7:30 am - 6:00 pm.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jermie E Cozart/  
Primary Examiner, Art Unit 3726

July 16, 2008